STATEMENT OF
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On Behalf of the

COUNTY OF JOHNSTON, NORTH CAROLINA

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SUBCOMMITTEE ON TELECOMMUNICATIONS, TECHNOLOGY, AND THE INTERNET OF THE COMMITTEE ON ENERGY AND COMMERCE

A National Interoperable Broadband Network For Public Safety: Recent Developments

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Chairman Boucher, Ranking Member Stearns, and Members of the Subcommittee, thank you for providing me the opportunity to appear before you today. My name is Jason Barbour and I am a nationally certified Emergency Number Professional (ENP), serving Johnston County, North Carolina as the 9-1-1 Director. I am also an active Captain of the town of Clayton, NC Fire Department and a sworn Deputy Sheriff for Johnston County. I am a Past-President of the National Emergency Number Association (NENA), an organization consisting of nearly 7,000 members in 48 chapters across the U.S., Canada and Mexico. Currently, I serve as NENA's representative on the board of the Public Safety Spectrum Trust (PSST). Finally, I am also a member of the Association of Public-Safety Communications Officials International (APCO). While I am actively involved in all of those organizations, I am here today only on behalf of the County of Johnston, North Carolina, a rural, yet fast growing county in Eastern North Carolina.

I have been working in the field of public safety communications for the better part of two decades and know firsthand the importance of our nation's 9-1-1 and public safety communications systems. During that time I have seen many life-saving technological developments. That being said, I can say without question, that I have never been as excited about a technological advancement as I am about the possibilities for 9-1-1 and public safety communications that will be enabled by broadband networks, services and applications.

In my testimony today I would like to make three points. First, broadband technologies provide significant benefits for emergency communications and, therefore, the citizens that rely

on public safety services. Ensuring that public safety agencies and emergency responders are connected to broadband (in all forms) must be a national priority. Second, any actions taken by Congress or the FCC must ensure a sustainable funding source to pay for public safety access to, and use of, broadband. Third, any proposal for the establishment of a wireless public safety broadband network must take into consideration the needs of rural America and ensure access to the network in *all* areas of the country.

I am here today on behalf of Johnston County, one of the nation's top 100 fastest growing counties, but still a rural area that faces some broadband deployment challenges. Johnston County is 800 square miles with a population of 163,000. The largest town, Clayton, has a population of 13,000. Given our close proximity to the research triangle in Raleigh, Johnston County 9-1-1 and emergency services agencies are more fortunate than many of our neighboring counties to the east in that we currently have two commercial wireline broadband service offerings available and four commercial wireless companies that provide wireless voice and data services. Today, Johnston County 9-1-1 relies exclusively on commercial offerings for wireline and wireless broadband service. We have approximately 300 police, fire, and emergency medical vehicles outfitted with mobile data cards providing wireless mobile data service. We work hand in hand with commercial operators in assuring we have the services we need, which are generally quite reliable. However, there are some gaps in coverage where service is not available. And currently we only pay to provide such access in vehicles, not for handheld devices in the hands of responders. In the not-so-distant future, we envision having our 9-1-1 center and all of our public safety agencies with high-speed wired broadband connections and all public safety agencies and individual responders with access to a robust high-speed 4G wireless broadband network.

Why Broadband?

When I got my start in public safety, the communications systems we relied on were technology challenged. There was no data communications among responders at all. The data that was shared at an agency level was done via low-speed telephone connections. There were large coverage gaps for public safety UHF/VHF radio communications, and the coverage was sporadic. When a deputy wanted to share information that was sensitive in nature, the officer needed to find a payphone because there was no encryption to allow for secure communications.

Today, we no longer rely on a low-speed data line to access the National Crime Information Center (NCIC) system and the North Carolina Division of Criminal Information Center. We can now attach and view photos of missing and wanted people. We have real-time access to jail recorders. We can access the North Carolina AWARE warrant system, view an area hospital's emergency room status, Web EOC, and transmit EKG's to hospitals from Ambulances. All of this can be done from the seat of a vehicle using commercially provided advanced wireless data services.

Imagine the possibilities of a high-speed broadband future for emergency communications. 9-1-1 centers will be connected to broadband and will be able to receive images and video directly from a citizen at the scene of an accident or a robbery. Real-time videos or images from the public will be able to be directed to responders in the field over a wireless public safety broadband network. Responders can use the wireless broadband system to download information on victims at the scene (such as electronic health records) or information on where to cut open a vehicle to extricate a victim without endangering responders. Building blueprints and information about the contents contained in buildings could be readily obtained. Incident management preplans or real-time video training on how to effectively handle an unknown hazardous material at the scene of the spill could be provided. These are just a few examples of what the broadband future could look like.

With that brief background on where we came from and where we want to go with broadband capabilities, I will offer you a word of caution based on an experience in Johnston County. Recognizing the limitations of our existing radio system, we decided to implement an 800 MHz digital trunked radio system in 2000. The system greatly improved our radio communications capabilities, system capacity, and coverage area. We also ensured that all public safety agencies in Johnston County were on the network and interoperable, and the county paid for the radios used by each local agency. While the system was vastly superior to the older VHF/UHF systems, it was also a lot costlier to operate and maintain. Individual radios went from $300 to $3,000 or $4,000. While the county paid for initial local agency radio systems, many of these local agencies were shocked at the price tag for individual radios when they needed to be replaced. To this day, local agencies are struggling to find money to pay for replacement radios.

I provide this example to illustrate a key point of my testimony. Access to spectrum alone is not sufficient, particularly in rural areas. Along with spectrum, there must be funding necessary to operate, maintain and utilize the network for public safety. As we look to the future of a wireless broadband network for public safety, we must ensure that initial *and* recurring funding is available for public safety to effectively utilize the network. If we are struggling to find the funds necessary to access the voice radio system we already have in Johnston County, how can we be expected to pay for a wireless broadband system? We must also ensure that public safety agencies are able to take advantage of the substantial research and development of the commercial wireless industry to ensure that radios on the network no longer cost $4,000 and that technology in the hands of emergency responders stays current.

How Do We Get There In Rural America?

No one doubts the potential of broadband for public safety in all areas, urban and rural. However, in rural America there are legitimate questions concerning how a wireless public safety broadband network can be paid for and built out. Any public safety agency would like to have access to a public safety owned and operated wireless broadband network. But the reality is that in many areas there is simply no funding to build such a network. Whether public safety has access to 10, 20 or 50 MHz of spectrum, the spectrum is only as good as our ability to pay for and build a network. This is why I, along with the rest of the national public safety community, was particularly interested in the FCC's original D Block concept in which public safety would have access to a broadband network, but would not have to pay the cost of building the network. Whether or not the original D Block public partnership can still work is a legitimate question, as it certainly failed on the first go around. However, a critical aspect of that plan was that the network would be built nationally (whether with a single national D block license or compatible regional licenses), and it would be built and paid for by a commercial partner. A known funding source and a known build out schedule were important two years ago, and, regardless of the specific plan that is adopted, they remain critical issues today, particularly for rural areas.

I commend all organizations involved in this debate for putting ideas on the table intended to result in positive solutions for public safety. Whatever the details of any plan may be, it is essential that they are reviewed to ensure that the result is a nation-wide network (or

network of networks) sufficient to meet the needs of public safety and that near and long-term funding is available for public safety to access the network. A nation-wide broadband network (or network of networks) would ensure that all public safety agencies, regardless of their size, location, expertise, or financial resources, would have the same opportunities to take advantage of the new world of broadband communications. I am concerned that absent a national framework, only those few agencies with substantial resources and expertise will be able to provide their public safety agencies and responders with state-of-the-art broadband communications. The result would very likely be islands of robust, and potentially incompatible, public safety broadband networks, surrounded by many unserved areas. Therefore, as Congress and the FCC address this challenge it is critical that any proposal be closely examined to ensure that (1) there is guaranteed buildout in *all* areas sufficient for public safety needs, not just those areas with the resources capable of establishing a network, and (2) there is a known source of funding for public safety to access the network.

Without commenting on any individual proposals, I believe several important questions must be answered. First and foremost, is there an identified recurring funding source to pay for access to and maintenance of the network for all areas? Will the proposal result in a nation-wide wireless broadband network (whether through a single license or numerous regional licenses)? Is there a high likelihood of success that such a network will be built out nationally on a known schedule? Will the network meet the reasonable and important needs of public safety? Will the plan ensure that the public safety network remains current and benefits from commercial research and development? If the plan calls for public/private partnerships, is there sufficient oversight by the FCC or other appropriate authority to ensure that such agreements are adhered to? If an approach is adopted that does not involve an auction with buildout requirements, is there sufficient evidence to conclude that there is a need for additional spectrum in rural areas and, therefore, an assurance that non-mandatory partnerships will emerge and result in a network being built in less populated areas? I am particularly interested in the answers to these questions for rural America.

Conclusion

In conclusion, I continue to believe that a nationwide public/private partnership model in one form or another is the only viable path towards a national, interoperable broadband public

safety network for all areas of the country. While some public safety agencies might otherwise be able to deploy their own broadband networks, and some might even be able to forge local partnerships with commercial entities, it is possible and likely that a significant number of public safety agencies will be left in the cold absent a requirement for a nation-wide network overseen by the FCC or other appropriate entity with sufficient oversight and authority to ensure such a network gets built out on a known schedule. Such a public/private partnership approach will relieve local agencies of the extraordinary cost of constructing and maintaining their own broadband infrastructure. It is also the most effective means of providing seamless, spectrum-efficient interoperability using state-of-the-art technology platforms.

Thank you for your support and the opportunity to be here today.